

REMARKS/ARGUMENTS

This paper is submitted responsive to the Official action mailed September 3, 2003. Reconsideration of the application in light of the accompanying remarks and amendments is respectfully requested.

In the aforesaid action, the Examiner indicated that claims 6 and 7 contained allowable subject matter. By the present amendment, dependent claim 6 has been cancelled without prejudice and incorporated into independent claim 1, and it is respectfully submitted that this places claim 1 in condition for allowance.

In the aforesaid action, the Examiner also entered several objections to the specification, drawing and claims, and this paper is responsive thereto as well.

Specifically, page 8 of the application has been amended as requested by the Examiner.

The specification has also been amended at page 8 to address the Examiner's concerns in connection with support for claims 2 and 8. While it is believed that these claims were supported in the specification as originally worded, the amendments to the specification have been made so as to address the Examiner's concerns. Specifically, the specification has been amended to match the scope of claim 2 in connection with combinations of pressure influencing structures and temperature influencing structures. By this is meant that the invention is drawn not only to pressure influencing and temperature influencing structures individually, but to these features in combination. For example, the load influencing structures illustrated, for example in Figures 2-5, can advantageously be combined with the thermal deflection influencing structures illustrated in Figure 7.

In connection with the additional thermal mass positioned on the rotor, the specification is clear that the additional thermal mass can be positioned on the housing or on other components of the compressor. The application has been amended so as to specifically recite the rotor as one of these other components, and it is believed that this subject matter is clearly supported by the specification.

No new matter has been introduced through these amendments.

In connection with the drawings, Figure 2 schematically illustrates a rotor pitch that decreases in magnitude, through illustration of a resultant load from such a rotor. It is

respectfully submitted that this is a sufficient illustration so as to comply with the requirements of 37 C.F.R. 1.83(a). It is also noted that the prior art cited by the Examiner, specifically, the Japanese publication 3-78594(a), includes an illustration of such a rotor, albeit for use in a different type of device. Based upon the foregoing, reconsideration of this objection is respectfully requested.

As to dependent claim 8, the drawings show an additional thermal mass positioned in one strategic location, specifically, at an end shoulder of the housing. The specification is clear that other locations can be desirable, including positioning on other components such as the rotor. It is respectfully submitted that Applicants are not required to provide drawings showing each and every potential location of the additional thermal mass, and that with the teachings of the specification and drawings, a person of ordinary skill in the art would readily be able to comprehend and perform the relevant positioning of additional thermal mass. Based on the foregoing, it is respectfully submitted that the drawings on this feature are also proper under 37 C.F.R. 1.83(a), and reconsideration of this objection to the drawings is therefore respectfully requested.

Dependent claim 10 was objected to, and the correction requested by the Examiner has been made.

In connection with the prior art, inasmuch as this rejection applies to the claims as presently amended, it is respectfully traversed.

Specifically, claim 1 has been amended to be in condition for allowance as discussed above. Further, new claims 11-13 have been added. New independent claim 11 is a method claim which calls for the positioning of the additional thermal mass at identified locations of thermal distortion. This claim language more clearly highlights the novel and advantageous features of the present invention. In contrast, the prior art of record, namely the Japanese publication, has structures which are positioned either for other purposes, or randomly, and in a manner which does not correspond with that set forth in the claim as newly presented. Specifically, the Japanese publication does not disclose or suggest the identification of a particular location where thermal distortion is an issue, and the specific positioning of thermal masses at that location.

Dependent claim 12 further specifies that the positioning of the thermal masses is selective positioning, that is, the positioning is limited to those areas identified as needing the

additional thermal mass. This claim, too, is submitted to be patentable over the art of record and further based upon its dependence from independent claim 11.

Independent claim 13 is also newly added and is drawn to the method of the present invention wherein an unloader is used to obtain a favorable and desirable resultant load on the rotor. Nothing in the art of record discloses or suggests this method of operation of a screw compressor.

Applicants enclose herewith a check in the amount of \$110.00 to cover the fee for a one (1) month extension of time request.

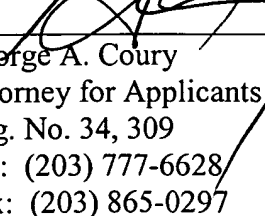
An earnest and thorough attempt has been made by the undersigned to resolve the outstanding issues in this case and place same in condition for allowance. If the Examiner has any questions or feels that a telephone or personal interview would be helpful in resolving any outstanding issues which remain in this application after consideration of this amendment, the Examiner is courteously invited to telephone the undersigned and the same would be gratefully appreciated.

It is submitted that the claims as amended herein patentably define over the art relied on by the Examiner and early allowance of same is courteously solicited.

If any additional fees are required in connection with this case, it is respectfully requested that they be charged to Deposit Account No. 02-0184.

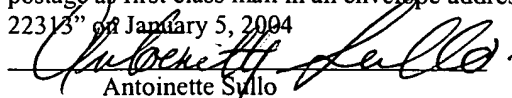
Respectfully submitted,

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Date: January 5, 2004

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313" on January 5, 2004


Antoinette Sylla